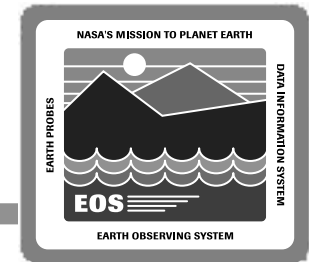


Off-Line

Jon Kuntz

22 May 1996

FOS Off-Line

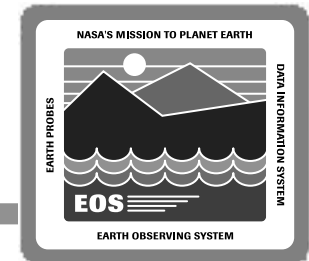


Command Management

Data Management

Analysis

Command Management



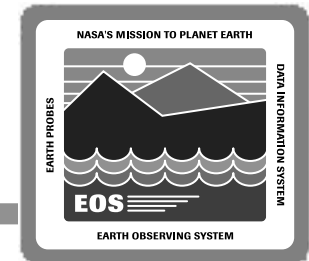
PAS/CMS Interface (*Design Change*)

- **PAS now includes commands within the activities, eliminating the need for CMS to access the activity database**

Load Generation (*Design Change*)

- **Partitions are determined using command boundaries, not activity boundaries, to ensure continuity of commands**
- **Refined inheritance structure for load classes**
- **During ATC load generation an ODF will be utilized, rather than accessing Sybase directly, increases processing performance time**

Command Management



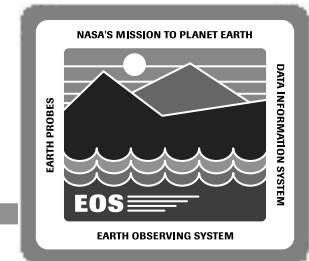
Spacecraft Model/Image Processing (*Design Change*)

- Separated the memory mapping and the image (dump) processing creating a new process - Image Processing, to improve performance and allow for multiple actions to occur simultaneously

Miscellaneous Changes (*Design Change*)

- Generation of command binary being shared with R/T command
- Identified and isolated additional AM1 specific functionality, improves extensibility & evolvability
 - AM1 load types
 - AM1 command types

Data Management



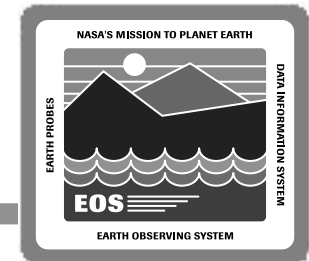
Sybase Interface Tool (*Design Change*)

- **Replaced DBXcessory with Internet browser to access Sybase**
 - **Provides access to PDB tables, file metadata, telemetry catalog, and event archive**
 - **Retains all required functionality**
 - **Provides opportunity for tremendous growth and flexibility**

Real-Time Interface to Sybase (*Design Change*)

- **Designed and implemented multiple Sybase server processes to access load information, file metadata, telemetry catalog, event definitions, and event archive**

Data Management



FDF Validation (*Design Change*)

- **Enhanced the design to utilize Sybase capabilities to perform most of the validation on FDF products**

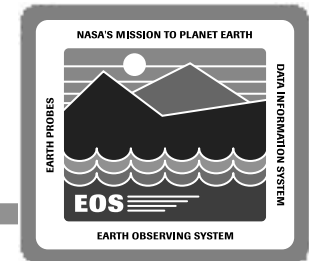
Event Database (*Design Change*)

- **Modified the design to store events in Sybase in lieu of UNIX files**
 - **Added double buffering scheme to alleviate potential bottlenecks**
 - **Sybase provides faster access and better search capabilities**
 - **Provides access to the event archive via Internet browser**

EDOS Interface (*Requirements Change*)

- **Updated the design to accommodate new EDOS ftp requirements**

DMS Changes



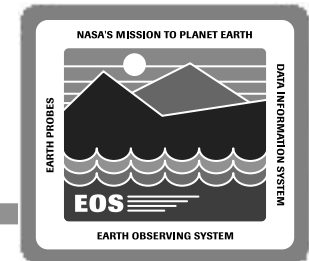
Project Data Base (*Design Change*)

- Continued working with the AM1 project to refine the interface for receipt of the I&T database
 - Documented in the AM1 DFCD
- Updated FOS Data Base table structures to accommodate the changes in the interface agreement
- Modified the telemetry and command validation procedures to coincide with refinements to the database

Operational Data Files (*Design Change*)

- Generated additional ODF's to accommodate design modifications by the subsystems

Analysis



Parameter Interface (*Design Change*)

- **Modified the design to utilize the refined FOS standardized interface for receipt of parameter data**

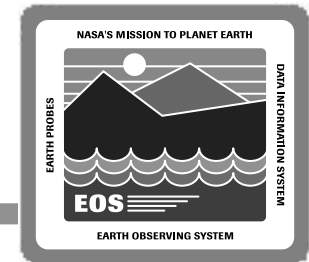
System Statistics (*Design Change*)

- **Modified the algorithm which uses day/night orbital statistics to generate the daily and monthly intervals to improve performance**
- **Modifications provided to support data processing with partial data for an interval**

Request Manager (*Design Change*)

- **Added feature to allow user to specify a request be processed locally rather than “farmed” to another UserStation**

Analysis



Solid State Recorder (*Design Change*)

- **Enhanced the design to include the concept of planning and recommending partial playbacks of the SSR buffers**
- **Enhanced the design to include a scheme for looking ahead at planned activities to aid in establishing playback priorities**